WHAT IS CLAIMED IS:

1. An isolated polynucleotide comprising a member selected from the group consisting of:

(a) a polynucleotide encoding the polypeptide as set forth in Figure 1;

(b) a polynucleotide encoding a mature polypeptide encoded by the DNA contained in ATCC Deposit No. 97184;

(c) a polynucleotide capable of hybridizing to and which is at least 70% identical to the polynucleotide of (a) or (b); and

(d) a polynucleotide fragment of the polynucleotide of (a) or (b).

2. The polynucleotide of Claim 1 wherein the polynucleotide is DNA.

3. The polynucleotide of Claim 1 comprising from nucleotide 523 to nucleotide 1533 as set forth in Figure 1.

4. The polynucleotide of Claim 1 encoding a soluble form of the polypeptide of Figure 1.

5. A vector containing the DNA of Claim 2.

6. A host cell transformed or transfected with the vector of Claim 5.

7. A process for producing a polypeptide comprising: expressing from the host cell of Claim 8 the polypeptide encoded by said DNA.

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8. A process for producing cells capable of expressing a polypeptide comprising transforming or transfecting the cells with the vector of Claim 5.

9. A receptor polypeptide comprising a member selected from the group consisting of:

(i) a polypeptide having the deduced amino acid sequence of Figure 1 and fragments, analogs and derivatives thereof; and

(ii) a polypeptide encoded by the cDNA of ATCC Deposit No. 97184 and fragments, analogs and derivatives of said polypeptide.

10. An antibody against the polypeptide of claim 9.

11. A compound which activates the polypeptide of claim 9.

12. A compound which inhibits activation of the polypeptide of claim 9.

13. A method for the treatment of a patient having need to activate a G-protein PAF receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 11.

14. A method for the treatment of a patient having need to inhibit a G-protein PAF receptor comprising: administering to the patient a therapeutically effective amount of the compound of claim 12.

15. The method of claim 13 wherein said compound is a polypeptide and a therapeutically effective amount of the compound is administered by providing to the patient DNA encoding said agonist and expressing said agonist *in vivo*.

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16. A process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim 9 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

17. The polypeptide of Claim 9 wherein the polypeptide is a soluble fragment of the polypeptide and is capable of binding a ligand for the receptor.

18. A diagnostic process comprising:

analyzing for the presence of the polypeptide of claim 9 in a sample derived from a host.

19. A method for identifying compounds which bind to and activate and which bind to and inhibit the receptor polypeptide of claim 9 comprising:

contacting a cell expressing on the surface thereof the receptor polypeptide, said receptor being associated with a second component capable of providing a detectable signal in response to the binding of a compound to said receptor polypeptide, with a compound under conditions sufficient to permit binding of the compound to the receptor polypeptide; and

identifying if the compound is an effective agonists or antagonist by detecting the presence or absence of the signal produced by said second component.

20. A process for diagnosing a disease or a susceptibility to a disease related to an under-expression of the polypeptide of claim 9 comprising:

determining a mutation in the nucleic acid sequence encoding said polypeptide.

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